

REMARKS

The Office Action dated October 7, 2003 has been received and carefully noted. The above amendments to the specification and claims, and the following remarks, are submitted as a full and complete response thereto. No new matter has been added. Claim 2 has been cancelled and claims 1, 5, 10-14, 17, 21, 23, 27 and 30 have been amended to more particularly point out and claim the instant invention. Claims 1 and 3-31 are submitted for consideration.

Applicants wish to thank the Examiner for indicating the allowance of claims 18-20, 22, 25-26 and 28-30 and indicating that claims 21, 23, 24, 27 and 31 would be allowable if rewritten to overcome the rejections under 35 U.S.C. §112, second paragraph. As indicated above, claims 21, 23 and 27 have been amended to address the rejections, as discussed below. Applicants note, however, that claim 31 was not actually subject to any objection or rejection and thus should be indicated as being allowed due to its dependency on allowed claim 26.

Additionally, the Office Action also indicated that claims 11, 12 and 17 contain allowable subject matter but depend from rejected base claims. Claims 11 and 12 have been placed in independent form and Applicants respectfully assert that claims 11 and 12 should now be allowed.

The Office Action included a request that the status for Serial No. 09/343,409 be updated in the first paragraph of the application indicating References to Related

Applications. Applicants have amended the specification to provide the patent number and issue date to the application upon which priority is partially based.

In addition, claims 2, 10, 13-17, 21, 27 and 30 were objected to because of minor informalities that have been addressed in the above amendments to those claims. Claims 5, 6, 23 and 24 were rejected under 35 U.S.C. §112, second paragraph, because of alleged antecedent basis problems with elements in claims 5 and 23. The above changes to claims 5 and 23 are respectfully submitted to address the issues with those claims. Reconsideration and withdrawal of the objections to and rejections of the claims are respectfully requested. As such, claims 18-31 should now be allowed.

Claims 1, 2, 5-10, 13 and 14 were rejected under 35 U.S.C. §102(e) as being anticipated by *Kerstein et al.* (U.S. Patent No. 6,393,548). Claims 3, 4, 15 and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Kerstein et al.* The above rejections are respectfully traversed according to the remarks that follow.

The present invention is directed, according to claim 1, to a network switch. The network switch includes a data port for communicating with a data network, a statistics counter connected to the data port for monitoring operational parameters associated with the data port, the statistics counter including statistics registers therein, a statistics gathering circuit connected to the statistics counter for reading the statistics registers, and for directly transmitting data from the statistics registers to a remote system memory and direct memory access circuitry, wherein the statistics gathering circuit transmits the data

from the statistics registers to the remote system memory via a Direct Memory Access (DMA) operation.

The present invention is directed, according to claim 13, to a method of monitoring port activity in a network switch. The method includes the steps of storing port activity data in a statistics register on the network switch, reading the port activity data with a statistics gathering unit, transmitting the port activity data directly to a remote system memory, thereby reconstructing the statistics register in the remote system memory and accessing the remote system memory with a remote CPU to read the reconstructed statistics register.

The present invention is directed to methods and apparatus for gathering and storing operational statistics for network switches in order to provide performance measurement, reliability determinations and accounting in charge-by-the-bit methods. Applicants note that in the Office Action, claims 13 and 14 are rejected in that they allegedly “have substantially all the limitations of the respective apparatus claims 1-2 and 10.” However, Applicants respectfully point out that the method claims 13 and 14 are quite different. Those claims require both “reconstructing the statistics register” and “accessing the remote system memory with a remote CPU to read the reconstructed statistics register.” Applicants respectfully assert that the above elements are not recited, even analogously, in claims 1, 2 and 10 and any rejection treating claims 13 and 14 as mere adjuncts of the apparatus claims would be *per se* improper.

Kerstein et al. is directed to a variable 16 or 32 bit PCI interface which supports steering and swapping of data. *Kerstein et al.* is concerned with providing a PCI interface that allows both 16- and 32-bit host processors to access internal registers on the chip and an external memory via a PCI bus. The Office Action makes reference to Figs. 1 and 2, and cites *Kerstein et al.* as disclosing that statistical network information in the form of management information base (MIB) objects to an external management entity. The Office Action also cites *Kerstein et al.* as teaching “the use of a direct memory access (DMA) operation between the registers and the remote memory” at column 6, lines 62-67 of *Kerstein et al.* However, Applicants respectfully assert that *Kerstein et al.* does not teach or suggest what has been alleged.

Kerstein et al. actually provides that a DMA transaction for transfer of a data frame from the receive FIFO over a data bus to the external memory. There is no disclosure, however, that “the statistics gathering circuit transmits the data from the statistics registers to the remote system memory via a Direct Memory Access (DMA) operation,” as recited in claim 1. The data transferred in *Kerstein et al.* is frame data, which occurs in the chip to process the packets that are received. As such, Applicants respectfully assert that the rejection of claim 1 is improper because *Kerstein et al.* fails to teach or suggest all of the elements of claim 1. Reconsideration and withdrawal of the rejection of claim 1 are respectfully requested.

With respect to claim 13, Applicants respectfully assert that *Kerstein et al.* fails to teach or suggest all of the elements of that claim. Claim 13 recites both “reconstructing

the statistics register” and “accessing the remote system memory with a remote CPU to read the reconstructed statistics register.” Neither element is disclosed in *Kerstein et al.* and neither would have been obvious in view of the disclosure of *Kerstein et al.* As such, Applicants respectfully assert that the rejection of claim 13 is improper and should be withdrawn.

With respect to the dependent claims 3-10 and 14-17, Applicants respectfully assert that those claims should be allowed for at least their dependence on claims 1 and 13. Additionally, with respect to the rejections of claims 7 and 8, Applicants respectfully assert that those claims are improperly rejected over *Kerstein et al.* for additional reasons. The Office Action cites column 1, lines 26-31 of *Kerstein et al.* as teaching elements of claim 7 and 8. However, claim 7 does not merely require the presence of a communications channel, but rather requires that “information is communicated from the data port to the statistics counter via the communication channel.” As illustrated in Fig. 1, data about the ports received thereat would not utilize the PCI Interface (39) to be utilized by the management MAC (38) through the management port. The Office Action cites *Kerstein et al.* for disclosing a PCI bus but the reference fails to teach the use of that bus to communicate the statistics information. As such, for this additional reason, Applicants respectfully assert that the rejection is improper and should be withdrawn.

As noted previously, claims 11, 12 and 18-31 should be allowed, based on the indications contained in the Office Action. As such, based on the above discussion,

Applicants respectfully assert that claims 1 and 3-31 should be allowed and the application be allowed to proceed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosure: Amendment Transmittal